Dental Care Program of

The Farm Security Administration
War Food Administration

by
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Introduction and Background

Dental programs sponsored by the Farm Security Administration were first organized following a demonstration of need among the farm families participating in medical care activities. Their growth has been fairly steady with considerable experimentation characterizing their development.

The first dental programs were of an emergency nature and were patterned after the organization of the medical care plans, since it was not then realized that there was a difference in providing dental care as contrasted to medical care. The original development was a program for medical care. Dental activities came into the picture because the attending physicians felt the need for a dental program as an adjunct to the problem of general illness. This accounts for the fact that the dental service was organized in combination with medical care and in many cases was rendered only on the advice of the attending physician. Now there is a tendency in the dental programsto provide care for children, to allow for the predominant need for extractions, and to make definite financial provision for the expected incidence of dental decay as it may appear from year to year. However, the principles of prepayment, community organization and voluntary participation are common to both the medical and dental care programs.

The popularly called "FSA Dental Care Programs" have actually never been one set type of plan. A quick survey would show various types of plans and many individual starts and stops in their operation. Some plans have become well established and are now a definite part of the community's health services, while others have been unsuccessful and were therefore abandoned.

One measure of success is the continuance of the program, and several factors determine this continuance. The type of plan seems to have relatively little bearing, but the acceptance of the plan by the families is the most important. This acceptance is determined largely by their appreciation of the services furnished by the dentist. This appreciation, in turn, is contingent on the quality and amount of education done by the dentist. Another factor that has contributed to the success or failure of the dental plan is the amount of money available for dental services. The usual limited funds forbade complete dental care. Unfortunately, the very procedures designed to overcome financial difficulties have narrowed the viewpoint of families, dentists and FSA personnel because greater emphasis has been placed on money than on building an adequate dental program.

The FSA dental care activities have increased from a modest beginning with a few families participating in a dental program in Arkansas. As of December 31, 1943, 39,144 families (199,453 persons) in 362 counties of 25 states were participating in some type of dental program. Most of the states with dental programs were in the Southern Great Plains and the Northwest areas. The majority of dental plans were in the South. (See map.) The programs varied widely in their scope, and ranged from providing emergency extractions on the recommendation of a physician, to formally organized community efforts to furnish complete dental care. During the fiscal year, $123,198.85 was reported paid on the approved charges of dentists participating in the FSA dental programs operating on the fee-for-service basis. This same fiscal year, ending June 30, 1943, the dentists received about 90 percent of their approved charges.

In order to understand more fully the dental programs sponsored by Farm Security, one should know something of the administrative details that interplay when health activities are organized and carried out. The FSA is an independent agency within the War Food Administration.1/ Its funds at present come from money appropriated by Congress for the U. S. Department of Agriculture, and are under the jurisdiction of the War Food Administrator. Authority to use federal funds for medical and dental care is found in the provision for loans and grants for Rural Rehabilitation in the USDA appropriation. It is interesting to note that there is reference to health services (with dental care specifically mentioned) in the 1945 Agriculture Appropriation Act.

The FSA is directed by an Administrator, (now Mr. Frank Hancock) who has a Chief Medical Officer (F. D. Mott, M.D.) on his administrative staff. The Office of the Chief Medical Officer deals with the many aspects of health services. The personnel consists of medical and nonmedical specialists, all of whom are engaged in the development and promotion of all types of rural medical care, such as hospitalization, nursing, physicians' care, dental care, environmental sanitation, drug service, and so on. Accordingly, the health specialist, physician, dentist, and statistician serve as advisers to the Chief Medical Officer in accordance with their technical training. He, in turn, formulates the policies of the Office of the Chief Medical Officer, and makes the necessary and pertinent recommendations for the approval of the FSA Administrator.

Directly under the administrative staff of the Washington office are the regional offices. The thirteen FSA Regions (see map) are made up of groups of states (including Puerto Rico) and vary in their size, depending upon the types of agricultural problems to be dealt with. These regional offices are headed by Regional Directors, who are responsible directly to the FSA Administrator for the functioning of the entire FSA program in their particular regions. A Regional Health Specialist is on the staff of the Regional Director. The staff of the office of the Chief Medical Officer acts in a technical advisory capacity to the Regional Director by working directly with the Regional Health Specialist. In some regions there may be a regional health services staff composed of professional and non-professional personnel such as health specialists and medical officers. Two dentists on the staff of the Chief Medical Officer assist in the development of the FSA dental activities by close collaboration with the Regional Director and his Health Services staff. The states comprising the regions are divided into districts. Each of these is composed of several counties. At the county level (the most significant single administrative unit) the FSA county supervisor, who may have one or more counties under his jurisdiction, is responsible for the various phases of the FSA program, including medical and dental services. The Regional Health Services staff and the County Supervisor work directly with the farm families.

Early in the development of FSA health service activities the Administrator requested the assistance of the United States Public Health Service. The first Chief Medical Officer was a USPHS commissioned officer and supervised a civilian staff. At present all of the professional staff in the Office of the Chief Medical Officer and the majority of the Regional Medical Officers are Reserve Commissioned Officers of the USPHS who have been detailed to the FSA on a reimbursable basis and who follow FSA administrative procedures.

1/ Prior to July 1, 1943 when the Office of Labor in the WFA was established by law, the FSA was active in furnishing health services to migrant agricultural workers. This activity is now handled by the Office of Labor and accordingly, the dental activities are not included in this report.

Let us suppose now that a farmer is in need of financial assistance to run his farm He can turn to a FSA county supervisor for a loan. His loan application is studied by a committee of farmers from his immediate locality and by the county supervisor. If the farmer can get credit from no other source but is capable of operating a farm. the loan application is approved. The loan is made and with the county supervisor's assistance, the money is used to improve farming practices, living conditions, healtl and so on. Sometime ago it was found that very often a cause of failure to pay back a loan was because of unforeseen medical bills. FSA developed medical care programs o the prepayment principle in order to protect its loans and to reduce the adverse effects of unexpected illness with subsequent medical bills. Dental care plans were originally started on this basis, but the present practice is to use the prepayment principle in a more definite relationship to accumulated and incremental dental defects. Originally most FSA families had insufficient funds for health services, and therefore loan funds--or in some cases in the past, grants--have been made available for health services to the farmers participating with FSA. Now, by grouping farmers into health associations, the prepayment principle was used so that farm families who remained well during the year helped to defray the expenses of those who became ill. This factor of "spread of risk" or insurance principle which works for medical care programs can not be so easily applied to group dental care programs, for the vast majority of persons participating can be assumed to need dental care.

Organization of Dental Programs--The Problem

After the medical care program came into being, it was determined that something should be done to alleviate oral defects, and dental programs were inaugurated as an integral part of the rural rehabilitation program. FSA personnel quickly found that the problem of providing dental care of even a limited nature to farm families with their stringent financial resources was a staggering one. The accumulation and neglect of dental diseases were found to be virtually universal among the low-income farm families. Experience has shown that even if the accumulated dental defects could be immediately corrected (an expensive procedure at best) there would still be a steady, almost mathematically predictable incidence of decayed teeth year by year. In 1939-40, a survey of 2480 FSA borrower families (11,497 persons) revealed that the most prevalent defect was that of dental caries. Of all the persons examined in the survey, 69 percent had decayed teeth and 85 percent of persons between the ages of 15 and 30 had decayed teeth. In addition to the problem of defects is the family's difficulty in getting service because of the shortage of dentists, now worse than ever. Even to a greater extent than physicians, dentists had settled in the larger towns and urban areas during the past few years, and at great distances from the farmers' homes. Not only were there too few dentists before the war, but the problem has become more acute as dentists have entered the armed forces. Many farm families combine their trips to the market with a visit to the dentist--often without an appointment, and usually because of a "jumping" tooth-ache. This is because of a lack of understanding (on the part of the families and the local dentist) of the need for protective care, particularly for children; and a complete inexperience by both in group health activities. We have found farm families are very willing to do their share in a group health activity even when their concept of adequate dental care is to "pull out" an aching tooth. The dental profession (in the dental office) must assume its responsibility, once the farm family member is in the dental chair, by furnishing actual dental health education and stimulating an appreciation for the need of yearly protective dental care.

Another problem is the limited financial resources of the FSA families. The average cash income available for living, recreation and health was $399 per family per year. This average income is but little higher today. Money to finance the dental programs was raised by the farm families either from their farm savings or by loans from FSA. In the special and experimental health programs FSA gave financial assistance by making grants to the Association. Loan funds must be paid back with interest

grants are in the nature of gifts. FSA lent additional assistance by means of its salaried personnel who worked with the farm families to build the dental programs.

Once the money was raised for the dental program, it was placed in a local bank, usually in a joint bank account between the families and FSA in the name of the health association. Funds were then drawn against their account to pay approved bills. One should note that dentists are paid from the joint bank account in the group plans, not by the families, directly. When a dentist submitted a bill for service rendered under the terms of the plan, he sent it to the trustee or to the dental reviewing committee. Dentists participating in the individual plan submitted the approved bill directly to the FSA County office. In the fee-for-service plans the reviewing committee corrected or approved the bill. They in turn submitted the approved bill to the trustee. The bill was then paid by proration, if necessary, or in full, depending upon the amount of money available. Under the capitation plan, payment is made on the basis of the number of persons for whom the dentist has accepted responsibility for care during the month or period.

An interesting feature was found in the combined plans where dental bills were considered to be preferred charges. This meant that approved dental bills were paid before any other service charge for which bills were submitted.

During the fiscal year 1942-1943 the dentists were reported to have received $108,195.37 in the separate plans, and $15,003.48 in the combined. Such reports were made for the fee-for-service plans only. The combined plans for this period paid 89 percent and the separate 90 percent of the approved fee-for-service charges. The average monthly approved charges per person eligible for dental care in the fee-for-service plans were about 9¢ in the separate plans and 3¢ in the combined.

Finally one should remember that even when FSA families become self-supporting and no longer need financial assistance, their dental problems will continue to accrue. FSA dental programs have furnished a good start, but their worth will be lost if dental care is not available when families are on their own.

Policies of Dental Programs

In order to permit flexibility, no set rules have been laid down in the organization of the dental programs. Plans are adopted to local needs. The high cost of restorative dentistry (such as dentures and crowns) and the very limited funds of the borrower families have brought about necessarily very limited dental programs.

Because of the fact that with a few recent exceptions (in the special health programs, entire dependence for dental care is upon the local practicing dentists, the first approach in organizing a dental program has been made through the local practitioner. In every case, local dental societies have been familiarized with FSA efforts to get dental services. Oftentimes, formal agreements have been reached with the state dental society. Sometimes these agreements are in the form of memoranda of understanding, with both parties signing, at other times the understanding is a "gentleman's agreement". These agreements are often placed on an annual basis, so that as experience is gained, by mutual understanding they may be quickly modified or changed to suit the circumstance. Ordinarily the state dental society agrees with the plan in principle, with the local dental society having the authority to work out the details with representatives of the FSA. During the past year, a definite trend towards working out agreements with the State Council on Dental Health (or its equivalent) has developed. All dental programs have been organized to meet the eight principles of the American Dental Association.

It is probably because of the powers vested in the local dental societies by the State Society, that dental programs, of considerable variation have been organized. The relative looseness of organized dentistry as compared with medical societies has in one way been advantageous as the local societies were entrusted with suiting the program to local needs, thereby accounting for the diversity found in FSA dental care programs. However, certain general characteristics occur in all programs. For instance, the plans are entirely voluntary. Neither is the dentist forced to accept any or all members of the plan, nor are all the families obliged to go to a designated dentist. Again, the majority of the dental plans organized on a group basis (individual plans, page-11, were the one exception) with families pooling their money. Committees appointed by the local dental societies to review bills are characteristic, as in the case of medical plans.

Early in the history of the FSA dental programs, it was recognized that complete dental services could not be furnished to each participating FSA family. Accordingly, provision was made to care for toothaches and other emergencies, but not to finish costly dentures or inlays. Group health activities in the strict medical sense will work if the enrollment is large enough, for a certain percentage will get sick and the remainder, who donot, help to bear the cost. However, this fact may cause trouble when applied to dntal care activities, as FSA has learned. The larger the enrollment, the more persons will need, and should get, dental care. Moreover, there is a direct relation between enrollment and cost, so that the limited funds must be balanced by limited services.

It is not intended to imply that the prepayment principle is not applicable to group dental programs. Prepaid dental plans have particular merit because they stimulate community activity and make definite provisions for budgeting funds in advance for dental care.

Added to these elements is the fact that FSA's primary purpose is to rehabilitate families through a balanced farm and home planning program, and to assist them to produce more food, rather than to furnish them with complete dental care per se; and so one can understand some of the organizational difficulties of the FSA dental plans

Because of these and other limitations, FSA in tackling the dental problem has tried to put first things first, and is now using the following spwcific steps in putting a dental program into effect:

1. Extractions for all ages--tc relieve pain and remove infection. (To avoid indiscriminate extractions, such services may be limited)

2. Fillings, prophylaxes and treatments (not root-canal or orthodontia) for children and youths 3-18 years of age.

3. Fillings, prophylaxes, and treatments for all ages.

4. Replacements (dentures, crowns and bridges.)

Attempts are made to accomplish step No. 1 before undertaking step No. 2, and so on. Note here that very few plans can embrace step 3, and step 4 occured only in the individual plans, which made specific provision for replacements. Usually when replacements were provided in the agreements, the patient paid for the cost on an individual basis, often with the assistance of grants, rather than through the group health activity.

The above steps represent a compromise or balance among several factors, the principal ones of which are: (1) the production of food comes ahead of dental care so far as FSA is concerned, (2) the primary objective of the dental plans is to save teeth, not restore those now gone, (3) the insurance principle or "spread of risk" will not work in the dental plan when funds are so strictly limited, (4) money for dental care is usually very limited, (5) the shortage of dentists in the rural areas has been acute for some time, (6) the family participating with FSA is likely to believe that adequate dental care consists of extractions (and perhaps "plates"). In spite of these limitations provision must be made in the dental plan for fairly complete care, if a reasonably adequate dental program is to be finally accomplished.

The policy is now in effect which keeps funds contributed by the families for dental care in a separate account. This book-keeping procedure is self-explanatory when dental care is the only service offered by the plan. However, when dental care is combined with other medical care, this policy offers a definite stability to the dental services. Sometimes not all money available for dental care in the one year has been spent. Such funds may be returned to the families, credited to the following year's dental program, or be used to make up possible deficiencies in other service accounts. The disposition of surplus funds is determined in advance by the agreement between the families and dentists.

During the past year or so, the principle of group organization has been strengthened in the dental programs, by placing considerable administrative responsibility on the families. This has been done by means of Boards of Directors elected by the membership, and the establishment of councils, including not only family representation, but also local dentists, and usually FSA representation, as well.

Structure of Dental Plans

The majority of the dental programs sponsored by the FSA were for low-income farm families participating in the rural rehabilitation program of the FSA. Funds came from the families themselves, either from income or loans, or both. Usually limitations in the amount of service to be included within the scope of the program were established in the agreement between the local dentists and the families. All dental programs, except some of the special ones, used local dentists. Families wishing dental care banded themselves into groups which may have been formally or informally organized. With the exception of the individual plans (page 11) the families pooled their funds. The voluntary principle was maintained by families selecting their own dentist from those who agreed to participate in the plan, and the dentist had the right to serve families or not as he may have wished. The amount of money that each family contributed was determined to a large extent by how much could be afforded for dental care. Funds contributed for dental care by the FSA families represented an actual reduction in money needed for farm and home living expenses, such as for feed or fuel or recreation. The amount of money for dental care ranged from $5 to $20 per family, per year, with an average of about $7.00. As the families were contributing out of their own resources, no more guarantee of payment of bills could be made than in the case of a "private" patient. The services furnished by the local dentists were principally extractions and some fillings. Exactly how much and what types of services were thus supplied the families is difficult to determine because of the inadequacy of records, a problem which we are attempting to correct. Considerable emphasis is now being placed on dentistry for children.

Because the principal FSA administrative component is in the county, the dental plans were county-wide, and each was considered statistically to be a "unit". Often, families of more than one county (usually adjoining) formed a group and when so combined, the plan was also called a unit. For instance, the plan in 12 counties in South Dakota is one unit, the "Pierre District Medical Aid Association." The dental plan in the county or unit was usually uniform for all participating families in order to avoid confusion, although in three counties, different plans did operate side by side within the same county.

For convenience the FSA dental plans may be classified by administration and by methods of payment.

By Administration	By Method of Payment
(a) Separate	(a) Fee-for-service
(b) Combined	(b) Capitation
(c) Special and Experimental	(c) Individual
	(d) Per hour

Plans are thus referred to as "separate fee-for-service", or "separate per hour", but not as "separate combined", or "capitation per hour".

FSA families participating in the rural rehabilitation program may have joined dental plans that were the only health service offered, or the dental service may have been in combination with other services such as general practitioner (physician), hospital, drugs, or surgery in any combination. If the plan offered dental services only, or if the membership of the dental plan was separated entirely from any other, the dental program was called "separate". When dental activities were offered along with one or more other health services, the dental program was classified as a "combined" plan. Both of these types of dental programs were built around the principle of group activity. The "special" or "experimental" dental plans represented programs which have received extra administrative attention, they were specially financed and all were unique in their organizational and managerial structure.

Services offered

Dental services offered by the FSA dental programs ranged from extractions on the recommendation of a physician to complete care including dentures. Many plans, particularly the more recent ones, included special provision for protective care for children. Combined plans tended to limit their services to extractions because they were established with a more restricted objective. Separate plans gave equal emphasis to fillings and extractions. Oral examinations and radiographic services were the least frequent services offered. The most complete care offered to the family was found to be in the separate individual units where the decision was left to the individual family and dentist. An important fact to recall is that grant funds formerly were supplied in the individual plans. Accordingly, more complete services could be considered. Review of the accomplishments of such plans in Michigan showed a predominance of extractions and dentures.

The range in coverage of services offered depended principally upon the intent of the program and the way it was established, rather than upon the method of payment. Fee-for-service plans were slightly more inclusive than the capitation. The few separate individual plans were the most inclusive of all. Extractions were offered most frequently; fillings, treatments, prophylaxes, examinations and X-ray diagnosis appeared in plans in the frequency of the order named. Most of the plans included a charge for administrative purposes (trustee's salary, postage, etc.) which averaged about 5 percent of the total funds available for dental care. A few plans offered extra services, such as dentures, crowns or bridges, by making provision for the families to have reduced rates. Actually when a member received such replacements, he paid for it out of his own pocket, rather than drawing on the pooled funds.

The services actually received by the families are difficult to determine because the reporting form did not include the provision for recording specific services. This lack of information is in keeping with the usual experience of local dentists' reluctance to furnish complete records of services rendered in their private offices.

It is a reasonable guess that approximately 80 percent of the service furnished by local dentists to FSA families consisted of extractions. The experimental and per hour plans have shown a greater emphasis on fillings than the usual rural rehabilitation dental programs. During the past few years the promotional activities of the American Dental Association have shown their effect in the many plans (both separate and combined) that place emphasis on protective dental care for children.

I. Separate plans

In general the separate plans were the most numerous of all the dental programs sponsored by FSA. As of June 30, 1943, about 71 percent of all FSA dental units were classified as separate. Such plans were active in all Regions with dental plans except VII. The separate plans which were in operation on December 31 started in 1938 with four units in Arkansas and one in Georgia, but the majority began functioning during 1941 and 1942. As Table 2 (page 13) shows, during the years when FSA was first developing dental programs, the separate and combined plans showed a parallel rate of growth in the number of programs established. From 1940 on, new separate plans were more often established than combined. Perhaps the explanation for this difference lies in the fact that dental programs were originally a sort of appendage to the medical programs and it was not until about 1939 that due emphasis was given to having the dental care programs stand on their own feet, at least to the extent of having separate and definite allotments of funds and provision for dental supervision. As a result, separate plans were emphasized during 1940 to FSA personnel, and during 1941, new separate plans far outnumbered the combined.

Generally the services offered by the separate plans were more inclusive than in the combined. The individual plans were the broadest in coverage. The average separate plan offered extractions, fillings, treatments and perhaps prophylaxes. Some plans offered extractions only. Very few of the separate plans make sepcific provision for educational procedures. The responsibility for this service has usually been left to the local dentists furnishing the service. Actually this error of omission constitutes the greatest weakness in FSA's dental activities.

Payment for services in the separate plans are by fees, capitation, or hourly. About 85 percent of the separate units used the fee-for-service principle. Such plans represent the oldest of the separate programs, and the majority began during 1942 and 1943. The largest number of these units was found in Regions V and VI. Separate capitation plans were the next in frequency with about 12 percent in this category. Such units have been in operation since 1939, but most were started in 1941. These units were found in Region V and VI only. The two per hour plans represented a recent development in FSA's dental activities. Separate individual units were found in Region II and III with four units in continuous operation since 1941. Such plans offered the widest coverage of services of all plans offered.

II Combined Dental Plans

Dental care programs offered in conjuction with other health services were not so numerous as the separate plans. Approximately 30 percent of the FSA dental units which were in operation on December 31, 1943, were combined with other units which were in operation on December 31, 1943, were combined with other health services. Combined units were the only dental programs in Region VII and were more frequent than separate in Region VIII and X. Two combined plans in Georgia started in 1936 and 1937, and they have been in continuous operation. They represent the oldest dental plans sponsored by FSA. Of the programs in operation on December 31, 1943 they represent the oldest dental plans sponsored by FSA. As in the case of the separate units, the majority of the combined units were started in 1939, 1940, and 1941.

The services offered families under the combined plans were generally very narrow. Usually extractions only were offered and quite often only on the recommendation of a physician. Although this stringent restriction is contrary to the usual dental practice, yet this plan was accepted by the local dentists. At present such plans are being modified to remove this limitation and to place control of dental professional matters in the hands of the participating dentists. Often times dental bills incurred in these plans were considered to be "preferred charges", that is, dental bills received a priority when payment was made. In terms of oral health the usual combined plan is not sufficiently inclusive to permit protective dental services. This criticism should not be interpreted to mean the combined plans cannot offer as complete care as the separate, for services are determined by the agreement between the dentist and the families. Another difficulty has been experienced in combined plans in determining the amount of money that was available for dental care. Under some of the combined plans, funds for all services were placed in a single account and the money for dental bills was taken out of this account as needed.

Combined dental services may be divided into grounds according to the method of payment, just as the separate plans. The fee-for-service combined plans were the most usual and constituted about 90 percent of the combined programs. Such plans are the oldest of all FSA dental activities in operation on December 31, 1943. This type of plan was the only one found in Region VII. The combined capitation plans were not outstanding in their number, nor did they present significant data. One combined special program was started in 1943 in Missouri.

III Experimental and Special Plans

Several dental plans, the majority of which were combined, have received considerable attention from FSA. Of six "experimental" plans for rural health developed in cooperation with the Inter-Bureau Committee on Post-War Programs of the U. S. Department of Agriculture, four included dental care as a part of the general health services. In addition, three special plans have been developed by FSA which although not classified as experimental, nevertheless are also furnishing valuable experience in rural dental health methods. One of the special plans consisted of dental care only and the other two included dental care as a part of the combined services.

The experimental and special plans have placed considerable emphasis on local administration by the farm families. In each plan eligible farm families may become members of a non-profit health association, which was usually incorporated. The membership of the health associations was composed of families who derived the major portion of their income from agriculture or was limited to FSA families. Local control was secured by means of a Board of Directors composed of elected representatives from the membership. The health associations operated under an approved set of by-laws with the boards of directors responsible for the operation of the program. In all plans except the special separate dental, each board of directors has employed a full-time manager to run the affairs of the association under their supervision.

Dental health services were furnished by agreements between the local dentists and the associations, or by the boards' employing full-time dentists. It so happened that four experimental plans with dental services used local dentists, whereas the special plans have used the pattern of employing full-time dentists who operated in dental trailers or used portable equipment in rural clinics. In all plans considerable emphasis was placed on protective dental care for children.

Funds to operate the program have come from membership contributions and supplemental grants from FSA to the health associations. The experimental plans used the pooled, fee-for-service, proration system for payment for service, whereas the special plans have placed dentists on a full-time salary basis.

Considerable valuable information concerning rural dental services has been gained from the experimental and special plans. Briefly, we have learned that a full-time local manager is invaluable in keeping the program going, maintaining membership and in generally conducting the affairs of the associations. Sufficient information has been gained to show that the members of the associations have received considerably more services from the local dentists than was expected. Services received from the salaried dentists tended to be of a high quality and gave considerable emphasis to protective care for children. Records of the experimental and special plans were far superior to those maintained in the usual FSA dental care program.

Description of Plans by Method of Payment

Turning now to the classification under methods of payment, four main types have been developed. "Fee-for-service" was the most common. The name is self-explanatory, as the payment is based on a schedule of fees. "Capitation" is based on a sum paid in advance at the rate of so much per head. "Individual" plans are those in which the family pays, not on the group principle, but on an individual or "private patient" basis. The "per-hour" plans pay for services at an hourly, or clinic rate. This is true of both the separate and combined types.

A. Fee-For-Service: In the great majority of plans of this type, the families pooled their funds and set up an account that was kept for dental care only. The families elected a trustee who was bonded and who had the job of handling the pooled funds and paying approved bills. Those local dentists who agreed to participate in the plan set up a fee schedule, using their local and usual fees as the basis. Often a reviewing committee of dentists, chosen by the dentists themselves, was established to go over and approve the dental bills for payment by the trustee. Final agreements concerning fee-schedules were approved by the participating dentists and the families or their elected representatives. The FSA does not set the fee schedule. The pooled funds were divided into twelve allotments, one for each month, or perhaps the division was made on the basis of quarterly (three months) allotments. If there were sufficient funds in the monthly or quarterly quota to pay all approved dental bills, they were paid 100 percent. If not, the allotment was prorated, that is, if there had been $150 worth of bills approved but only $100 available, then each dentist submitting a bill was paid in the ratio of 100/150 or two-thirds of his approved charges. If surplus funds accrued during the allotment periods, they were carried over to the end of the year to be used to pay for any deficiency. If after all bills were paid in full at the end of the year, funds were left in the pool, they were distributed to the families or carried over for the next year's program in accordance with the agreement between the families and the dentists.

Fee-for-service plans have merit in that; (1) they were easily understood by the families and conformed to the usual method of charging for services rendered; (2) they allowed for community organization; (3)a long time program could be established; (4) families contributed funds in accordance with their income, and (5) the plans were voluntary. Unfavorable factors were; (1) it appeared that the majority of services furnished under this type of plan were extractions; (2) proration was too easily misunderstood, and led to discontent; (3) such plans have not alleviated the shortage of dentists; (4) there was no supervision of the quality of work accomplished by the local dentists; (5) little was accomplished in dental health education; (6) record keeping was usually inadequate for complete analysis of the plans, and (7) even though families contributed funds, not all applied for dental care.

B. Capitation Plans: Dental programs, operating under this method of payment used the prepayment and pooled fund principles just as the fee-for-service. Each family selected a dentist from the participating group and the amount of money contributed by the family for a year's dental service was credited to the account of that dentist. Services to be furnished were agreed upon in advance. An example of how one plan works is, if 25 families should select Dr. Jones and each family contributed $7, then Dr. Jones would know that one-twelfth of $175 would be available for him each month. He would furnish limited dental care in accordance with the agreement and would receive the previously determined allotment. Families could change dentists at the end of any month if they wished. Such capitation plans were developed to overcome the objections of proration. Advantages and disadvantages of the capitation plans are quite similar to those outlined above for the fee-for-service-plans except for proration.

C. Individual Plans: The individual plans did not use the group health principle, for each family made its own arrangement with a local dentist of their own choice. The interested family (not just the individual) had an estimate made of the entire family's dental needs. This estimate was then discussed with the FSA county supervisor and it was determined whether or not the family could afford to borrow part or all of the funds to pay for the needed care. Because there must be the expectation of repayment, not all the recommended services could be so financed. In the past, grants to individual families increased the money available for dental services. For this reason, particularly services under this type of plan, were usually fairly inclusive and provision was made for dentures. If the family could not repay the cost of the estimate, an adjustment was made between the family, dentist, and county supervisor. Such an adjustment may have involved adjusting fees, reducing the service, or, in the past, assisting the family with grant funds. When the loan was approved and the money was deposited in a local bank to the family's account, the dentist was notified and the work accomplished in accordance with the agreed upon estimate. On completion of the work, the bill was paid. This type of plan operated in Michigan and Ohio and was not too successful in the former. The reasons for such plans discontinuing were the shortage of dentists in the rural areas and misunderstandings on the part of FSA personnel. The advantages of the individual plan are: Complete dental care is considered and can be supplied within the limits of funds available; the local dentists like the plan; the entire family is considered rather than one individual; the amount of money that is to be available is definitely established before the work is begun, and the plan is voluntary. Disadvantages are: there is no community activity; the plan has operated on an annual basis with no provision for the yearly increment of dental defects; little educational work has been included as an integral part of the program; difficulties were encountered by too long an interval between the estimate and the final approval of the loan application, and there is no supervision of the quality of work.

D. Per Hour Plans: The few dental programs in operation which are characterized by payment on an hourly or clinic rate, represent the most recent FSA dental plans. The principal difficulty in getting such plans under way on a larger scale is the reluctance of the local dentists to break away from the tradition of fee schedules. In the per hour plans, the dentist agrees to charge a fixed rate per hour regardless of the type of dental work accomplished. Services to be furnished are usually limited with replacements excluded, and are agreed upon by the participating families and dentists. The families agree to go to the dental office on an appointments basis. They understand that if they fail to keep their appointments and do not give reasonable notice to the dentist, that they lose their turn to go to the dentist, even though they have paid their participation fee. As this type of plan is constructed on the pooled fund basis, funds not used by one family may be available

for another needing more than the common number of appointments. The per hour plans eliminate operation and offer an inducement to place greater emphasis on protective dental care (fillings) and education. This method of payment is usually a novelty to the local dental practitioner. FSA's limited experience in such plans prevents definite conclusions at this time. However, the service reports indicate that better care is furnished when a payment is on a clinic, rather than on a fee basis.

The above data has been assembled so that persons with experience in dental public health methods may have a better understanding of the FSA dental program. One should not regard this material as final or complete for the answer to the problem of rural dental health has not yet been found. Rather the material should be read in the light of experiences gained and methods used by one federal agency in seeking solutions for the control of a wide spread health problem. Additional material concerning FSA dental activities is to be incorporated in an annual report.

It is our hope that the reader will be stimulated to inquire further into FSA's experience in developing health services for the rural population.

Washington, D. C.
July, 1944

Approved
F. D. Mott, M.D.
Chief Medical Officer

Table 1

Year of Establishment of FSA Dental Units Which Were in Operation on December 31, 1943

	1936	1937	1938	1939	1940	1941	1942	1943
Separate	--	--	5	27	27	75	51	21
Fee-for-service	--	--	5	25	24	61	44	16
Capitation	--	--	--	2	3	10	6	4
Individual	--	--	--	--	--	4	--	--
Per Hour	--	--	--	--	--	--	1	1
Combined	1	1	3	22	22	18	7	9
Fee-for-service	1	1	3	19	22	16	6	7
Capitation	--	--	--	3	--	2	1	1
Per Hour	--	--	--	--	--	--	--	1

Table 2.

Separate and Combined Dental Care Groups
Offering Service as of December 31, 1943

		Units	Counties	Families	Persons
U. S. Total	All	304	362	39,144	199,453
	Separate	216	239	28,097	145,459
	Combined	88	123	11,047	53,994
Region I	Separate	1	1	150	1,200
Region II	Separate	4	4	81	258
Region III	All	2	7	1,721	9,525
	Separate	1	1	96	427
	Combined	1	6	1,625	8,698
Region IV	All	12	18	591	3,350
	Separate	5	5	241	1,391
	Combined	7	13	350	1,959
Region V	All	138	151	21,066	112,180
	Separate	127	140	18,953	100,377
	Combined	11	11	2,113	11,803
Region VI	All	57	59	6,664	33,081
	Separate	55	56	6,471	32,126
	Combined	2	3	193	955
Region VII	Combined	17	36	1,684	8,675
Region VIII	All	57	59	4,187	16,934
	Separate	14	15	635	2,966
	Combined	43	44	3,552	13,968
Region IX	Separate	2	3	244	1,523
Region X	All	3	3	185	877
	Separate	1	1	21	86
	Combined	2	2	164	791
Region XI	All	6	7	295	1,536
	Separate	3	3	101	462
	Combined	3	4	194	1,074
Region XII	All	5	14	2,277	10,714
	Separate	3	10	1,104	4,643
	Combined	2	4	1,173	6,071

Table No. 3

States With Group Dental Care For Farm Security Administration Borrower Families
December 31, 1943

	Combined with Medical Care				Separate				Total			
	Units	Counties	Families	Persons	Units	Counties	Families	Persons	Units	Count.	Fam.	Per.
Alabama	5	5	1398	7606	34	34	9793	50829	39	39	11191	58435
Arkansas	1	1	103	490	32	32	3202	15897	33	33	3305	16387
Colorado	1	1	48	183	1	1	21	86	2	2	69	269
Georgia	3	3	306	1880	76	89	7109	38199	79	92	7415	40079
Idaho	3	4	194	1074	1	1	21	109	4	5	215	1183
Kansas	5	6	438	2144	—	—	—	—	5	6	438	2144
Louisiana	—	—	—	—	4	4	469	2254	4	4	469	2254
Maine	—	—	—	—	1	1	150	1200	1	1	150	1200
Michigan	—	—	—	—	4	4	81	258	4	4	81	258
Mississippi	1	2	90	465	19	20	2800	13975	20	22	2890	14440
Missouri	1	6	1625	8698	—	—	—	—	1	6	1625	8698
Nebraska	11	17	801	4023	—	—	—	—	11	17	801	4023
New Mexico	1	1	1145	5935	1	7	932	3941	2	8	7080	9876
N. Carolina	1	1	81	530	3	3	62	339	4	4	143	869
Ohio	—	—	—	—	1	1	96	427	1	1	96	427
Oklahoma	11	11	1121	5636	1	1	32	170	12	12	1153	5806
Oregon	—	—	—	—	1	1	37	174	1	1	37	174
S. Carolina	3	3	409	2317	17	17	2051	11349	20	20	2460	13666
S. Dakota	1	13	445	2508	—	—	—	—	1	13	445	2508
Tennessee	5	6	215	1140	—	—	—	—	5	6	215	1140
Texas	33	36	2458	8468	15	17	775	3498	48	53	3233	11957
Utah	—	—	—	—	2	3	244	1523	2	3	244	1523
Virginia	1	6	54	289	2	2	179	1052	3	8	233	1341
Washington	—	—	—	—	1	1	43	179	1	1	43	179
Wyoming	1	1	116	608	—	—	—	—	1	1	116	608
	88	123	11047	53994	216	239	28097	145459	304	362	39144	199453

Table 4.

Membership of FSA Dental Service Groups
as of December 31, 1943

	Units	Counties	Families	Persons
COMBINED				
Fee for Service	81	110	8,990	43,219
Capitation	6	7	432	2,077
Individual	--	--	--	--
Per Hour	1	6	1,625	8,698
Total	88	123	11,047	53,994
SEPARATE				
Fee for Service	187	205	24,438	126,013
Capitation	23	28	3,461	18,675
Individual	5	5	177	685
Per Hour	1	1	21	86
Total	216	239	28,097	145,459
COMBINED AND SEPARATE				
Fee for Service	268	315	33,428	169,232
Capitation	29	35	3,893	20,752
Individual	5	5	177	685
Per Hour	2	7	1,646	8,784
Total	304	362	39,144	199,453